Special Education of Atypical Children in Maryland

Report of the Committee Appointed by the Maryland State Board of Education

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August 10, 1956

Mr. Wendell D. Allen, President
Maryland State Board of Education
2 West Redwood Street
Baltimore 1, Maryland

Dear Mr. Allen:

The Committee to Study the Educational Needs of Atypical Children in Maryland, appointed several years ago by Dr. Thomas G. Pullen, Jr., pursuant to your instructions, transmits herewith its Report.

The importance of the subject matter, the method of study, and the recommendations are, of course, set forth in the Report itself. Suffice it here to note that the Committee found the field not only enormous in scope but one with which it was most difficult to grapple in practical terms. Insofar as possible, we have endeavored to make our recommendations specific; but as will be observed, this is often impossible.

The Committee would like to note with gratitude that the State Department of Education, the local departments of education, and all of the institutions and groups involved in the study co-operated fully and cheerfully in all respects. Any want in the Report is chargeable to the Committee alone or to the intrinsic difficulty of the subject. The Chairman is especially beholden to Dr. Thomas G. Pullen, Jr., State Superintendent of Schools, and Dr. Geneva Ely Flickinger, Supervisor of Special Education, for their great help and consideration.

Respectfully submitted,

George W. Constable
Chairman

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REPORT ON SPECIAL EDUCATION OF ATYPICAL CHILDREN IN MARYLAND

I. PURPOSE OF STUDY

The purpose of this study is to respond to the request of the Maryland State Board and State Department of Education that they be advised and assisted in determining a satisfactory program of education for atypical children in Maryland. It is estimated that there are almost 4,000,000 atypical children in the United States, or about ten per cent of the school population, kindergarten through grade 12, who deviate from the norm to such an extent that they need special education services. Proportionately this means that in Maryland about 58,000 children* require such services. The problem of the Department of Education is to meet this need.

Apart from the sheer magnitude of the problem, several other reasons lie behind the request for such a study. One reason is the greatly awakened sense on the part of both educators and public that the exceptional child is not receiving the special attention needed and that the time is at hand for an extension of existing programs—an awareness that asks to be informed and guided. Another reason is the concern over a potentially unbalanced program that might result from the special pressures exerted on behalf of certain types of atypicality —a danger that calls for hard decisions on matters of proportion and co-ordination. A third reason is the recognition that the ferment of new ideas, facts, and techniques in the field of special education requires a comprehensive survey to sift fact and opinion in order that necessary decisions can be made.

* The Committee believes that this is a true figure but at the same time cautions the reader that any statistics should be qualified by supporting evidence and careful analysis.

II. THE COMMITTEE

To meet these needs, the State Department of Education, under the leadership of Dr. Thomas G. Pullen, Jr., and with the authorization of the State Board of Education, appointed in September of 1951 a Committee composed of twenty-one persons. These persons consisted of specialists in various types of disability, interested parents, representatives of State agencies connected with special services to atypical children, members of the Department of Education having to do with special education, interested lay persons, and the State Superintendent of Schools. In the course of the study, several of the original members—Miss Henrietta Schwartzenbach, Mrs. Frank W. Oman, and Dr. E. Preston Sharp—were compelled, for good reasons, to resign. There were added to the Committee the following: Mr. Raymond L. Manella, Mr. Joseph A. Hunter, and Dr. Harry F. Latshaw.

The list of members is given below:

Mrs. Ernest V. Baugh, Jr.
Mr. Charles Cornish
Dr. Edward Davens
Dr. Geneva Ely Flickinger
Dr. William G. Hardy
Mr. Joseph A. Hunter
Mr. Robert Jones
Dr. Harry F. Latshaw
Dr. Paul Lemkau
Dr. Arthur Lichtenstein
Mr. Thomas F. McNulty
Mr. Raymond L. Manella
Mrs. Gertrude Nilsson
Dr. Winthrop Phelps
Dr. Thomas G. Pullen, Jr.
Mr. Louis J. Rauh
Dr. Roy O. Scholz
Dr. George F. Sutherland
Mr. R. C. Thompson
Dr. D. W. Zimmerman

Mr. George W. Constable, Chairman

III. METHOD OF PROCEEDING

The Committee was given no deadline for its report; in fact, it was encouraged to take as long as it deemed necessary to make a thorough investigation. The State Department of Education co-operated in every way possible. In addition, funds for calling upon consultants, purchasing books, travel, and other items were made available as needed.

The Committee met soon after its appointment to survey the nature of its task. It was agreed that its study should be comprehensive and thorough and that it should not proceed hastily in order to meet any fixed schedule. Further, it was felt that any recommendations would be valuable only insofar as the Committee had mastered the voluminous background material. Accordingly, the work was divided into three phases, in the following order; the first two being, as it were, a prelude and preparation for the ultimate task embraced in the third:

First, a determination of who the atypical child is—Who is included? What are the proper categories from the point of view of special education? How many are there of each? Where are they located?

Second, a determination of what is being done presently in the way of special education

And *third,* partly overlapping the second phase—What should be done? What is to be recommended in the way of changes or additions in the existing program?

The Committee took approximately one and one-half years in completing phases one and two. The most difficult part of the task lay in discovering the approximate numbers and locations of exceptional children. In this, the Committee is especially grateful to Dr. Davens and Dr. Flickinger for their labors in amassing statistics, local unit by local unit, and category by category.

Only when phase two was well along did the Committee take up phase three. As each class of atypicality is so different from the others, has so vast and intricate problems, and involves so much research, it was obvious that the entire Committee could not cover all the

fields in detail. Therefore the work was divided among seven subcommittees as follows:

Subcommittee	*Chairman*
Visually Handicapped	Dr. Roy O. Scholz
Speech, Hearing, and Language Disorders	Dr. William G. Hardy
Locomotor and Other Physical Conditions	Dr. Edward Davens
Gifted Children	Dr. Geneva Ely Flickinger
Mentally Retarded	Mr. Thomas F. McNulty
Maladjusted (Other than Delinquent)	Dr. Paul Lemkau
Maladjusted (Delinquent)	Dr. Arthur Lichtenstein

Each of these subcommittees was given full scope to proceed as it felt best: consulting experts, taking trips of inspection, collecting and studying the literature, and holding discussions. It will serve no purpose to give in detail the work done by each committee, other than to say the number of man-hours spent was enormous.

Special comment should, however, be made with regard to one of these subcommittees. The Subcommittee on the Visually Handicapped was fortunate in enlisting the interest and help of the American Foundation for the Blind and the National Society for the Prevention of Blindness. These societies generously turned their staffs and funds to our benefit by making exhaustive surveys of the Maryland needs. These are far more comprehensive studies than have ever been made before in this area of atypicality in Maryland. The citizens of Maryland owe a great debt of gratitude to these societies for their invaluable help, a debt which the Committee partially repays by adopting so many of their ideas and recommendations.

Altogether the subcommittee investigations took about two years. The entire Committee met very little during this period in order not to impede the work of the separate studies.

The results of the several subcommittee studies were embodied in preliminary reports. These were then considered by the entire Committee. Thereafter these reports were amended or enlarged to reflect the judgment of the whole Committee insofar as the recommendations were concerned. While too bulky and long to incorporate in this Report, these subcommittee reports are printed in a separate publication, since it is felt that they contain essential and useful information and discussions bearing on the recommendations made.

It was considered significant that the recommendations converged

in many respects. One especially significant convergence of ideas was in the matter of the need of teaching the teachers of atypical children. An eighth subcommittee, headed by Dr. Hardy, gave special attention to correlating the findings and recommendations in this field.

Finally, a special subcommittee was appointed to draft an over-all report, putting together all the recommendations and simplifying the matter as far as its nature would permit. This general report was then submitted to the entire Committee and adopted with amendments.

IV. WHO ARE THE ATYPICAL CHILDREN REQUIRING SPECIAL EDUCATION?

Numerous difficult problems arise from this question. Are gifted children to be considered atypical to the extent of requiring special education? What of the morally delinquent? How classify a child with multiple handicaps (for example, a crippled child with a speech defect)? At what point is a child to be deemed mentally retarded, or atypical in vision or hearing for educational purposes? What age limits are to be embraced in the special program for each category?

The Committee is of the opinion that for the purpose of special education the categories of includable atypicality are as follows:

I. Physical

- A. Vision
  1. Blindness—Those who are unable to function by visual means
  2. Partial sight—Those who, in spite of visual disability, are able to function by visual means
- B. Hearing
  1. Profound impairment (deafness)
     a. End-organ
     b. Central
  2. Moderate impairment
- C. Speech
  1. Articulatory defects
  2. Voice disorders
  3. Retarded development
  4. Stuttering
- D. Language disorders
  1. Verbal symbolization
  2. Printed symbolization
- E. Locomotor and other physical conditions
  1. Cerebral palsy
  2. Poliomyelitis

3. Other orthopedic defects
4. Cardiac
5. Epilepsy
6. Disfigurement
7. Tuberculosis (adult pulmonary)
8. Other

II. Mental

A. Giftedness—I.Q. 130 and above with creative ability; lower I.Q. with a specific talent

B. Retardation—I.Q. 70-80 and below with a similar state of retardation in other phases of development

1. Educable
2. Trainable

III. Maladjusted (psychological)

A. Legally adjudged delinquent

1. Institution
2. Probation

B. Other than legally adjudged delinquent

1. Maladjustment due to brain damage, showing such symptoms as hyperactivity, difficulties in abstract thought and such specific deficiencies as aphasia
2. Severe maladjustments due to unknown or psychogenic causes, including withdrawal, schizophrenia, and autism
3. Less severe maladjustments of psychogenic origin, including neurosis, nondelinquent conduct disorders, and such educational disabilities as reading disorders
4. Maladjustment as the result of neglect or of marked contrast between home and school cultures

The multihandicapped child is to be classified according to the best consensus of his needs.

It was felt that the age limits to be embraced in the special education program should be lowered; that is, programs of identifying and prescribing for exceptional children in the public schools should begin at an age earlier than six years. This will be touched upon more specifically in the subsequent recommendations.

V. HOW MANY ATYPICAL CHILDREN OF EACH CATEGORY ARE THERE AND WHERE?

The Committee urges great caution on the part of readers of this Report in the interpretation of any single figures concerning handicapping conditions in children. One frequently hears that "there are 62,000 crippled persons in Maryland" or that there is some other number within another type of disability. Such figures purporting to estimate the "total number of crippled children" or for that matter the "total number" of children in any category such as poliomyelitis, cerebral palsy, or hearing impairment may be misleading to the average reader *unless carefully qualified.* The Committee asks, therefore, that the figures* in the accompanying table be considered in the light of the following qualifications.

There is no such thing as a complete register of all cases in any category of handicap. Registers simply reflect the interest in the particular program, the extent of facilities and funds available to help, and the interest of the professional staff, agencies, and public.

There is a tremendous variance in ease of finding atypical children. Some defects such as club feet or cleft palates are practically self-

* Figures of estimated prevalence in the table are based on the following formulas:

Formulas Used in Estimating Prevalence of Various Handicapping Conditions

I. Physical

A. Vision

1. Blindness—2.50 per 10,000 children
   Estimate based on the figure of 1 of every 4,000 school children as stated in Publication 113 of the National Society for the Prevention of Blindness, Dr. Franklin Foote, Executive Director
2. Partial sight—20 per 10,000 children
   Estimate based on figure of 1 of every 500 school children given in studies by the National Society for the Prevention of Blindness
3. Operative conditions and refractive error—1,000-2,500 per 10,000 school children
   Estimate based on source given above was 25 per cent; estimate based on results of vision testing in schools was 10 to 20 per cent as given by 23 county health officers—Maryland experience justifies use of 15 per cent. (This refers to children in need of *some* medical eye care, usually on a corrective basis.)

evident and easily found; others such as hearing impairment, rheumatic heart disease, and visual defects are extremely subtle, being difficult to diagnose and difficult to find. Moreover, in the types such as epilepsy, there is a strong tendency toward concealment because of public miscomprehension compounded of ignorance, superstition, and prejudice.

B. Hearing

1. Profound impairment (deafness)—10.00 per 10,000 school children

   Estimate based on figure of .1 per cent of school children suggested by Dr. W. G. Hardy, Director of Hearing and Speech Center, Johns Hopkins Hospital, and based on a conservative appraisal of various reports and studies

2. Moderate impairment—150-300 per 10,000 school children

   Estimate based on figures of 1.5 to 3 per cent of school children given by Clarence D. O'Connor, Superintendent of Lexington School for the Deaf, New York City, in *Education of Exceptional Children,* 49th Yearbook, Part II, National Society for the Study of Education, University of Chicago Press, pages 159 and 183. (Most estimates agree that about 5 per cent of school children have hearing loss *sufficient to warrant further study,* but many in this group are medically correctible and do not require intensive special education.)

C. Speech

1. Articulatory defects

   a. Nonorganic—400 - 600 per 10,000 school children

      Estimate based on studies by Dr. Wendell Johnson, Professor of Speech Pathology, University of Iowa, as given on page 177 of reference mentioned above

   b. Organic

      1) Cleft palate—14.29 per 10,000 school children

      Estimate based on figure of 1 per 700 live births, generally accepted among many plastic surgery surveys and confirmed by conversation with Dr. Edward A. Kitlowski, Professor of Plastic Surgery, University of Maryland; Dr. Milton Edgerton, Associate Professor of Plastic Surgery, Johns Hopkins Hospital; Dr. William G. Hardy, Director, Speech and Hearing Center, Johns Hopkins Hospital; and by a special study done on birth certificate reporting in Baltimore City by Dr. Matthew Taback, Director of Biostatistics, Baltimore City Department of Health

      2) Cerebral palsy—13 per 10,000 school children

      Figure based on 50 per cent of the cerebral palsied, with estimate of total prevalence of cerebral palsied given below

      3) Hearing impairment—All serious hearing impairment involves a speech problem.

      Estimate of prevalence given above

Incidence of Exceptional Children: State of Maryland

Category	Estimated Prevalence Based on Established Formulas [a] among Children Enrolled in Public and Nonpublic Schools [b]			Actual Numbers Exceptional Children Known to	
	Counties (387,408) [b]	Baltimore City (193,646) [b]	State (581,054) [b]	Crippled Children's Program 1955-56	Public Schools [k] 1955-56
I. Physical					
A. Vision					
1. Blindness	97	48	145	.....	40
2. Partial sight	775	387	1,162	[e] 4,510	802
3. Operative conditions and refractive error	58,111	29,047	87,158		.....
B. Hearing					
1. Profound impairment	387	194	581		82
2. Moderate impairment	5,811 to 11,622	2,905 to 5,809	8,716 to 17,431		1,064
C. Speech					
1. Articulatory defects	15,496 to 23,244	7,746 to 11,618	23,242 to 34,863	[f] 11,990	
2. Voice disorders	3,874	1,937	5,811		4,376
3. Retarded development	1,937	968	2,905		
4. Stuttering	2,324 to 3,874	1,162 to 1,937	3,486 to 5,811		653
D. Language disorders	.....	.....	.....	.....	.....
E. Locomotor and other physical conditions					
1. Cerebral palsy	1,007	504	1,511	[g] 1,045	223
2. Poliomyelitis and other orthopedic	6,586	3,292	9,878	7,810	1,203
3. Cardiac	1,937	968	2,905	1,760	593
4. Epilepsy	1,550	774	2,324	1,595	275
5. Disfigurement	.....	.....	.....	[h] 715	38
6. Tuberculosis (adult pulm.)	.....	.....	.....	220	.....
7. Other					581

II. Mental					
A. Giftedness	3,874	1,937	5,811	.....	.....
B. Retardation					
1. Educable	9,685	4,841	14,526	.....	2,618
2. Trainable	1,550	774	2,324	.....	665
III. Maladjusted					
A. Legally adjudged delinquent					
1. Institution	c 328	c 410	c 738	.....	.....
2. Probation	d 750 to 850	d 750 to 850	d 1,500 to 1,700	.....	.....
B. Not legally adjudged delinquent	39,000	19,000	58,000	.....	605
Total	Figures not totaled, as some children are included in more than one category				

a See page 14.

b Includes children (grades 1-12 inclusive) enrolled in public and Catholic schools, Fall of 1955, plus children enrolled in private, non-Catholic schools, Fall of 1954. Figures for 1955 were not available at time of publication.

c Average number of children under care in State training schools over period of nine months, 1955-56, based on monthly reports, State Department of Public Welfare

d Estimate determined through discussions with members of staff of Division for Juvenile Causes of Circuit Court of Baltimore City

e Mostly refractive errors, injuries, tumors, and squint

f Many of these are preventive problems of conditions leading to hearing impairment.

g Includes *all* grades of severity from birth to 21; does not include many cases known to the Baltimore League for Crippled Children and Adults and/or to the City Health Department.

h Includes cleft palate, congenital anomalies of face, burns, facio-dental handicaps, and others.

k Includes no figures for Baltimore City and only partial figures for Baltimore County. The Baltimore City Department of Education estimates that it served approximately 8,000 handicapped children of all types during 1955-56.

Another important fact is that all handicaps, disabilities, and diseases *vary in severity* from completely negligible (from the standpoint of needing medical attention, education, or vocational guidance) to extreme severity where custodial care is the only solution. Given one hundred cases of rheumatic fever, some may be simply potential cases requiring occasional medical observation, some may need six months of bed rest, and some may be completely bedridden with a prognosis of early death. With respect to vision, of a thousand children screened in a school program, a few may be blind, more may be partially sighted needing definite special arrangements for education, some may need operations, and some may need glasses or merely continued medical observation. Among a group of epileptics, some will have such mild petit mal that the only indication is a slight nod of the head once every six months and others will be in a constant state of extreme convulsions and unconsciousness. Dr. Winthrop Phelps states that of the seven children with cerebral palsy born per 100,000 population each year: one dies in infancy; two are mentally retarded; one is mentally normal but severely handicapped in locomotion and communication; two are mentally normal moderately handicapped; and one is so mild as to require no special consideration medically or educationally.

Finally, and perhaps most important, all concerned should be think-

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2. Voice disorders—100 per 10,000 school children
   Estimate based on figure of 1 per cent of school children given in 49th Yearbook of National Society for the Study of Education (mentioned above), page 180
3. Retarded development—50 per 10,000 school children in elementary grades
   Estimate given on page 183 of source mentioned above
4. Stuttering—60 - 100 per 10,000 school children
   Estimate given on page 177 of source mentioned above

D. Language disorders—No formula available

E. Locomotor and other physical conditions
   1. Cerebral palsy—26 per 10,000 children
      Estimate based on figure of 7 born every year per 100,000 population derived from long and extensive experience and study by Dr. Winthrop Phelps in Maryland, Pennsylvania, New Jersey, District of Columbia, and other places. Of these 7, one dies in infancy. This leaves 6 per year or 102 (6 x 17) who are less than 18 years of age per 100,000 population. This includes all grades of severity. (1/3 have epilepsy, 1/3 are mentally retarded, 1/2 have organic speech disorder.)

ing in preventive terms. This means more preoccupation with the conditions which lead to crippling. Examples are the various infections or accidents which lead to blindness, the unpasteurized milk which leads to bone tuberculosis, the poor home conditions and hemolytic streptococcal infections which lead to rheumatic fever, and the repeated attacks of respiratory disease and otitis media leading to hearing impairment. In the Crippled Children's Program in the State Department of Health, a primary concern is the early detection and prevention, not necessarily of the handicap, but of the conditions leading to handicap. Many of the cases currently on the Crippled Children's register are of this nature.

Nevertheless, the accompanying figures will give a clear idea of the substantial size of this problem and the relative proportions between different types of handicaps. The Committee believes there is no bet-

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2. Orthopedic defects (including poliomyelitis)—170 per 10,000 children
   Estimate based on studies made by Samuel W. Wishik and reported in "Handicapped Children in Georgia: A Study of Prevalence, Disability, Needs and Resources," *American Journal of Public Health,* Volume 46, 1956, page 185
3. Cardiac—50 per 10,000 school-age children
   Estimate based on figures of .5 to 1 per cent of school children given by John R. Paul, "The Epidemiology of Rheumatic Fever and Some of Its Public Health Aspects," New York American Heart Association, 1943. (Rheumatic fever incidence is declining.)
4. Epilepsy—40 per 10,000 of school-age children
   Estimate based on Selective Service figures and the analysis of these figures by the Michigan Epilepsy Center as given in Report of Committee on Statistics on Epilepsy for Michigan, Michigan Epilepsy Center, 1951, and in L. B. Hershey's Subcommittee on Aid to the Physically Handicapped of Committee on Labor, Washington, D. C., U.S. Government Printing Office, 1945. (Includes one third of cerebral palsied children)
5. Disfigurement—No formula available
6. Tuberculosis (adult pulmonary) — No formula available (declining incidence)

II. Mental

A. Giftedness—100 per 10,000 children
   Estimate (representing highly gifted of 130-135 I.Q. and above) based on the figure of one per cent, reported on page 266 of *Intelligence of School Children* by Lewis M. Terman; on page 11 of *The Gifted Child* edited by Paul Witty; and on page 44 of *Gifted Children* by Leta S. Hollingworth

B. Retardation

1. Educable—250 per 10,000 population

ter way of finding the precise dimensions of the problem than by setting up adequate diagnostic facilities, as has been done by the Crippled Children's Program in the State Department of Health, and by providing at least the minimal range of needed special education services and facilities.

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2. Trainable—40 per 10,000 population
   Estimate based on figures ranging from 2 to 5 per cent as reported by Binet and Simon, page 8, *Mentally Defective Children;* by Lewis M. Terman and Maud A. Merrill, *Measuring Intelligence;* and by A. Levinson, *The Mentally Retarded Child*

III. Maladjusted

A. Legally adjudged delinquent
   1. Institution—No formula available
   2. Probation—No formula available

B. Not legally adjudged delinquent—1,000 per 10,000 school-age children
   Figure suggested by Dr. Arthur Lichtenstein, Director of Division of Special Services, Baltimore City Public Schools, and reported in *Baltimore Bulletin of Education,* Vol. 33, No. 2, March, 1956

VI. EXISTING PROGRAMS OF SPECIAL EDUCATION

The several subcommittee reports* attempt an analysis of the existing program in each of the categories of atypicality. This Report is limited to a factual statement concerning the special education programs in the Maryland public schools in 1954-55. Obviously this summary will not be up to date as of the time of publication.

Special education is a part of the regular public school program on the elementary and high school levels. It may be defined as any supplementary education service for exceptional children (those who are orthopedically handicapped; defective in speech, sight, or hearing; emotionally disturbed; gifted; or retarded) whose mental or physical deviation is such that it keeps them from developing to their maximum in the regular program.

Instructional activities in the field of special education are, therefore, an extension of the general education program. The learning experiences for exceptional children are planned just as experiences for other children are, with a view to developing their bodies, minds, and feelings by giving them appropriate competencies, understandings, and attitudes concerning the world in which they live. Special testing and sometimes highly individualized programs of instruction are necessary in order that educational opportunity may be realized. Various adjustments are made in materials, methods, and organization to achieve this goal. Types of services now offered are psychological testing, screening for defects, special transportation to the regular school, special classes in the regular school, special schools and centers, physical therapy, occupational therapy, speech therapy, home and hospital instruction, and assistance in financing attendance at special schools outside the child's regular public school facility.

Psychological testing is a necessary service in identifying children who deviate mentally. It is used as one means of determining placement in special classes. Only Baltimore City, Baltimore County, Anne Arundel County, Montgomery County, and Prince George's County have qualified personnel who devote full time to this service. The remaining counties use either qualified staff members who give part time to testing or psychologists in the mental hygiene clinics of the local departments of health.

* The subcommittee reports and accompanying data will be printed in a separate publication.

Hearing and vision screening is a program of testing ears and eyes through the use of the audiometer and either the Massachusetts Vision Test Kit or the Snellen Chart. In most counties qualified personnel give annual tests to all children enrolled in specified grades and to all others who are referred by teachers. Within recent years, because of the increase in school population, some counties have had to reduce the service about half, with children tested every third or fourth year. When defects are found, children are referred to their physicians or to a clinic for a more thorough examination and for treatment if it is indicated. Within the school, adjustments are made in their education programs in accordance with the findings.

A special class is composed of a specified number of children enrolled in a regular public school, all the children in a given class having similar conditions and therefore in need of a certain type of special instruction. In Maryland these classes exist for children who are retarded mentally (educable or trainable), handicapped severely in vision or in hearing, disabled orthopedically, disturbed emotionally, and very defective in speech. Baltimore City calls special classes for mentally retarded children "opportunity," "special center," and "trainable" classes, on the elementary level; and "shop center" classes on the higher level (C.A. 13+).

A special center is either a small unit in a regular public school or a public school in itself, in either case devoted entirely to educating handicapped children. Such centers exist usually for severely handicapped children. In Maryland there are centers or classes for the retarded who are trainable, the severely orthopedically handicapped, and the speech defective who is severely handicapped. Of the trainable classes, in September, 1955, there were 6 in Baltimore City, 1 in Allegany County, 3 in Anne Arundel County, 8 in Baltimore County, 3 in Carroll County, 3 in Harford County, 6 in Montgomery County, 6 in Prince George's County, 2 in Washington County, 2 in Wicomico County, and 1 in Worcester County. Of the orthopedic centers, there were 2 large schools in Baltimore City (the William S. Baer School and the Francis M. Woods School); one center in Anne Arundel County; 1 class in Frederick County; 1 center in Montgomery County; 1 center in Prince George's County; and 1 class in Washington County. There was one center for speech defective children in Baltimore City.

Speech therapy is a program of assistance to the child with a speech disability. It deals with mild articulation problems as well as with

the more severe cases of cleft palate, stuttering, and, when possible, aphasia. Therapists work with children only two or three times a week either individually or in groups, although occasionally a special class is organized to care for the very severe cases. Hearing therapy for children with moderate impairment may be organized as the speech program is organized, with therapists assisting children several times a week. For children with profound impairment, however, a special class is necessary.

Home and hospital instruction is a service offered to any child whose physical or mental condition is such that a qualified specialist certifies that the child cannot attend school and indicates that the child is able to benefit by the service. Three hours of instruction are given each week.

Special State Aid for the Handicapped is available, under certain standards, up to $600.00 a year toward payment of tuition for attendance at a special school (recognized by the State Department of Education) outside a child's own public school, if the local superintendent indicates that he has no appropriate facility for the child. In non-equalization counties, the same aid is also available for each severely handicapped child for whom the superintendent provides an appropriate program in the public school system. In an equalization county, if an appropriate facility is available in the public school system, State aid is provided in the same manner as it is for all regular classes, the only difference being a lower pupil-teacher ratio.

These educational services for exceptional children are administered and supervised at State and local levels by special and general supervisors. In the State Department of Education, a supervisor of special education is employed to study the needs of exceptional children and to assist local departments of education in developing adequate programs, while in the local departments of education both special and general supervisors are involved to the extent that programs for exceptional children require their services.

The State Board of Education determines standards, rules, and regulations which are applied in accordance with local conditions and needs, because each local department of education has conditions which are peculiar to its locality and personnel. The State supervisor advises concerning policies and practices, but all people concerned discuss the problem and reach a decision in accordance with the needs of the group.

Local departments of education differ in both organization and

program. Each department assigns responsibility for the exceptional child to the supervisor (or supervisors) best qualified, from the standpoint of preparation and position, to plan and supervise special services.

Allegany County employs a supervisor of special education to direct the program there. This program in 1954-55 consisted of 8 special classes for 128 mentally retarded children on the elementary level, 3 special classes for 56 mentally retarded children on the high school level, special help for 25 partially seeing children in regular classrooms, speech therapy for 216 children with defective speech, and home instruction for 23 children who could not attend school. It included also screening for vision and hearing defects all children in grades 2 through 6 and grade 10 as well as referrals from other grades, and co-operating with parents, private physicians, and the local department of health to remedy defects and prevent further harm to eyes and/or ears. In addition to these services, the supervisor of special education worked with parents of severely retarded children and with private agencies and volunteer groups interested in promoting and rendering service to exceptional children. In September, 1955, one class was organized for 12 severely retarded children. The department of pupil personnel assists in case finding and testing children.

Anne Arundel County employs a general supervisor in charge of special education who works under a director of special services in supervising a program consisting of special classes, home instruction, speech therapy, and screening for visual and auditory defects. In 1954-55, there were 9 special classes for 133 mentally retarded children on the elementary level, 1 special class for 19 retarded children on the high school level, 2 special classes for 18 physically handicapped children, 2 special classes for 15 emotionally disturbed children, speech therapy for 571 children, and home instruction (under 2 full-time teachers and several individual teachers) for 72 children whose disabilities prevented their attending school. In addition, all children in grades 2 through 6 were screened for vision defects and all children in grades 1, 3, 6, 9 were screened for hearing defects with follow-up of those requiring medical service. Throughout the year also, the supervisor worked closely with the school psychologist and the supervisors of pupil personnel in locating and diagnosing exceptional children, especially the severely retarded for whom a special center was opened in September, 1955. In 1954-55, 17 handicapped children attended special schools outside the County.

Baltimore County employs a supervisor of special education who is responsible for organizing and supervising programs which meet the needs of exceptional children. The supervisor of special education comes under the direction of the assistant superintendent in instructon. The supervisor of special education works co-operatively with the director of clinical services whose staff of five psychologists serves as a diagnostic clinic for children referred for placement in programs of special education. The departments of pupil personnel, guidance, and transportation co-operate in planning programs for pupils requiring special education. The three departments noted above come under the direction of the assistant superintendent in administration. Other agencies such as the Baltimore County Health Department, the Welfare Department, Children's Aid and Family Service, as well as the vocational rehabilitation service of the State Department of Education often play prominent roles in dealing with exceptional children and their families.

The program in Baltimore County in 1954-55 consisted of 6 special classes for 83 mentally retarded children on the elementary level, 11 special classes for 211 children on the high school level, 1 special class for 11 partially seeing children, speech therapy for 1,200 children, and home instruction for 101 children who could not attend school. Throughout the year, many severely mentally retarded children were seen and tested with a view to placing them in a special training center under the public school system. In September, 1955, this center, known as the Ridge School, opened with 8 special classes for 80 severely retarded children. In addition to these services all children in grades 1, 3, 5, 8, 10, 12 were screened for vision, and all children in grade 3 and referrals from grades 1 and 2 were screened for hearing defects. There were 120 children who, because they could not be educated in the County public schools, were aided in receiving their education in other schools.

In those counties that do not have supervisors of special education, the supervisor of pupil personnel assumes responsibility for whatever special services are required for exceptional children, with the supervisor of elementary schools and the supervisor of high schools assisting with the supervision of classes where they exist. The home instruction program in 1954-55 cared for 4 children in Calvert County, 5 in Caroline, 11 in Carroll, 13 in Cecil, 9 in Charles, 11 in Dorchester, 12 in Frederick, 4 in Garrett, 56 in Harford, 7 in Howard, and 3 in Kent. In all the counties children were screened for vision and hearing defects in specified grades. In addition to these services in 1954-55,

Calvert, Caroline, and Cecil counties each had one special class caring for 18, 17, and 17 mentally retarded children respectively. Frederick County had a class for 8 orthopedically handicapped children and gave speech therapy to 257 children; Harford County gave speech therapy to 353 children and organized a center for 18 severely retarded and otherwise handicapped children. Carroll County worked throughout the year to organize one special class for retarded boys on the high school level and 3 special classes for severely mentally retarded children. These four classes opened in September, 1955.

Montgomery County employs a supervisor of special education who works co-operatively with the department of pupil personnel. Three psychologists, one hearing consultant, three speech therapists, one sight consultant, one occupational therapist, and one physical therapist work in testing, planning with teachers and principals, and giving corrective help wherever needed. These services in 1954-55 consisted of 14 special classes for 187 mentally retarded children on the elementary level, 2 special classes for 30 mentally retarded children on the high school level, 1 special class for 9 emotionally disturbed children on the high school level, 2 special classes for 26 physically handicapped children; home instruction, under the direction of a full-time home teacher, for 77 children; speech therapy for 244 children; and screening all children in grades 2 and 3 for hearing defects. In 1954-55, 50 children, for whom there was no program in their own public schools, attended special schools with State aid.

Prince George's County likewise employs a supervisor of special education. A school psychologist and the department of pupil personnel work closely with special education. Two full-time home teachers assume responsibility for instruction given at home and in the hospital. In 1954-55, the special education program consisted of 14 special classes for 170 mentally retarded children (including 6 classes for 60 children who were severely retarded), 1 special class for 7 partially seeing children, 2 special classes for 15 orthopedically handicapped children, and 1 special class for 8 children with severe hearing disabilities; speech therapy for 631 children; and home instruction for 92 children. In addition to these services, all children in grades 2, 5, 8, 11 were screened for sight and in grades 1, 4, 7, 10 for hearing defects, and 30 children who could not be educated in the County public schools were given State and County aid in receiving education in other special schools. The County helped in paying tuition for an additional 5 exceptional children.

In the remaining counties, the services of the department of pupil personnel and of the general supervisors are used for special education. During 1954-55 Queen Anne's and Talbot counties each had 1 child receiving State aid in attending a special school, while home instruction was given to 4 children in Queen Anne's County, to 6 in St. Mary's, to 5 in Somerset, to 6 in Talbot, and to 9 in Worcester. In February, 1955, Worcester County organized a special class for 10 severely retarded children. In all counties children were tested for vision and hearing defects in specified grades.

Washington County has developed its special education facilities in close co-operation with the local department of health. In 1954-55, the following special classes were organized: 2 for 24 severely retarded children, 8 for 167 retarded children on the high school level, and 1 for 5 physically handicapped children. Home instruction was given to 10 children; speech therapy to 50 children; and special State aid to 3 children. Children in grades 1, 3, 5, 7, 9, and 11, as well as referrals from other grades, were tested for vision and hearing defects. These services are under the direction of the supervisor of pupil personnel and the director of instruction, assisted by the supervisor of elementary schools and the supervisor of high schools.

In Wicomico County special education services in 1954-55 consisted of 2 special classes for 37 mentally retarded children; 1 class for 9 severely retarded children; home instruction for 17 children; speech therapy for 158 children; and special State aid for 2 children. In addition, vision screening was provided for all children in grades 1, 3, and 5 and hearing screening for all children in grades 1, 3, 5, 7, 9, and 11.

The Baltimore City Department of Education through its Division of Special Education has organized various programs for handicapped children in its public schools. The Division consists of a director and 3 supervisors who plan and supervise these programs. The Division of Special Services assists in the administration of tests and in the interpretation of test results, a service which is especially useful in connection with the program of State aid for attendance at nonpublic special schools. The Baltimore City Deputy Superintendent administers all programs involving State aid to Baltimore City handicapped children.

The program for retarded children in Baltimore City in 1954-55 consisted of 122 classes for a total of 2,457 children, distributed as follows: 102 opportunity classes (primary, intermediate, and mixed)

for 2,205 educable children; 6 classes for 61 trainable children; 3 classes for 48 educable children with orthopedic disabilities; 3 special center classes for 34 children; and 2 orthopedic centers for 21 children. In addition, there were 6 resource classes organized to give special help with reading problems to 88 slow-learning and/or retarded children.

The shop centers of Baltimore City are also considered, in part, as special education, although they are included in the Vocational Education Program at present. These centers, to which retarded children may pass at the end of their years in elementary school, are not exclusively for them nor do they care for all retarded children. Many of these children are enrolled in regular classes in the junior high schools of the City.

In the area of physical disability, the Baltimore City public school system served 1,795 children. This program consisted of 6 classes for 88 elementary children and 1 group of 4 junior high school children, all with vision handicaps; 7 classes for 88 elementary children and 1 group of 2 junior high school children, all with hearing disabilities; 1 class for 7 children suffering from aphasia; 1 speech center for 89 children with varying degrees of speech disability; 9 therapists serving 1,206 children with other types of speech defects; 17 classes for 269 children who either were suffering from cardiac conditions or were orthopedically handicapped; and 3 classes for 42 children with cerebral palsy.

During 1954-55 also, 541 children were taught at home or in the hospital, while 134 handicapped children received State aid toward their education in a nonpublic school because the City school system had no facility appropriate to their needs.

Programs for gifted children vary throughout the State. The Baltimore City Department of Education has a program of acceleration, at one time beginning in the elementary grades and proceeding through high school. This program made it possible for some superior children to complete their elementary education one year ahead of their regular classmates, to finish junior high school in two years instead of three, and on the senior high school level to engage in a program culminating in work which prepared them for entrance to the sophomore year of college. At the present, acceleration for individual students is made possible, but acceleration of whole classes of pupils on an organized basis is discouraged on the elementary level, although such a plan is in effect on the high school level.

For a period of years, School No. 49 has served accelerated junior

high school children, 700 of whom were enrolled during 1954-55. Of these, 227 ninth graders proceeded to senior high school with about 15 entering an accelerated program and the remainder selecting a regular program. In September, 1956, programs for acceleration will be offered at the Pimlico Junior High School and the Woodbourne Junior High School as well as at School No. 49.

In 1954-55 also, 73 children graduated from Baltimore City high schools with certificates entitling them to entrance in the second year of college. The high schools involved were City College, Western High School, Polytechnic Institute, and Douglass High School. In September, 1956, the Eastern High School is offering a special college preparatory course beginning in the tenth grade. Admission to the programs of acceleration is based on I.Q., reading level, and arithmetic level, as well as on work that the child performs in school.

In addition to this program of acceleration, the Baltimore City public schools have been providing enrichment materials for children on both elementary and high school levels. These materials are used by superior children in the regular grades. The purpose of this enrichment has been to challenge these children to develop as fully as possible at the regular level of instruction. In some schools, children are organized in special groups for these experiences. Supervisors and principals assist the teachers in developing adequate programs for these children.

The special education program for gifted children in Baltimore City has been exhaustively and ably studied by a committee appointed by the City School Commissioners under the chairmanship of Professor Trueman Thompson. This report has been of great assistance in the study conducted by the State.*

In the counties of Maryland few children are accelerated. In preference to acceleration the county school systems rely on a program of enrichment which has taken several forms. Two counties have experimented by placing superior children in a special class with materials carefully selected to challenge their ability. Several counties use the procedure of homogeneous grouping (with re-grouping for different activities) in order to let those with special talent associate with others of like ability while engaging in particular types of work. Most superior children, however, remain in the regular grades under heterogeneous grouping and depend on the regular teachers

* "The Superior Child in the Baltimore Public Schools." *Baltimore Bulletin of Education,* Vol. XXXI, No. 5, June, 1954.

for whatever enrichment is provided. Four counties—Anne Arundel, Baltimore, Montgomery, and Prince George's—have appointed committees to study the needs of superior children and to establish programs to meet these needs.

In addition to the special education services described above, the State of Maryland has established by law on a State-wide basis institutions to care for various types of atypical children. The State Department of Mental Hygiene operates the Rosewood State Training School for residents of Maryland who are mentally retarded. This institution accommodated 1,715 persons of all ages in 1954-55. The Department of Mental Hygiene has developed several programs at Rosewood; those dealing with educational services are the rehabilitation therapy and the school programs. In 1954-55 the rehabilitation therapy program included 129 children in occupational therapy, 546 in industrial therapy, 420 in music, and 1,172 in weekly recreation (activities ranging from simple walks to sports). The school program enrolled 198 children. In October, 1955, a new school building was opened.

The Maryland State School for the Deaf, a public institution governed by a Board and under the general supervision of the State Superintendent of Schools, cares for children who have profound hearing loss. During 1954-55 there were 138 children enrolled. The program is devoted primarily to developing communication facilities with these children from nursery school through high school with special reference to pre-vocational and vocational preparation. The institution operates an elementary and high school program for the children.

The Maryland School for the Blind in Overlea is a private institution supported largely by State funds. During 1954-55 it cared for 138 children who were residents of Maryland. Within this institution there is an elementary and high school program through the tenth grade, after which most of the children enter one of the Baltimore City high schools. Some go into special work while others continue their education at the School and receive a certificate in lieu of a high school diploma. Each year from 2 to 5 Maryland children are graduated from the Maryland School for the Blind. Most of the children learn Braille but, when printed matter can be utilized because of efficient use of low visual acuity, sight-saving materials are provided. There are no education facilities in Maryland for multihandicapped children who are blind.

The State Department of Public Welfare operates four training schools for delinquent children: Boys' Village at Cheltenham for Negro boys, the Loch Raven Training School for white boys, Barrett School at Glen Burnie for Negro girls, and Montrose Training School for white girls. These institutions admit only children legally detained or committed to them. The programs are, therefore, programs of therapy directed toward the rehabilitation of the total personality. In the treatment plan developed for each child shortly after admission, particular attention is paid to his educational needs. An appropriate program including academic and vocational learnings is arranged. During 1954-55, 1,825 children were admitted to these institutions.

Children with particular disabilities may be hospitalized at private hospitals operated specifically for children: Kernan Hospital for Crippled Children, Children's Hospital, Happy Hills Convalescent Home for Children, and St. Gabriel's Home in the Baltimore area and the Christ Child Convalescent Home in Bethesda. All such children, if the doctor recommends the activity, receive instruction from teachers employed by the local department of education. In addition those who are tuberculous may be hospitalized at Eudowood Sanatorium which is privately operated but also receives State aid.

At the present time Maryland has no public institutions specifically designed to care for severely emotionally disturbed children. A 60-bed hospital for this purpose, however, will be built on the campus of the Rosewood State Training School under the Department of Mental Hygiene. Disturbed children are now cared for in other institutions.

In 1951 the General Assembly of Maryland amended the special education law to allow the State to finance a program of attendance at special schools in or out of the State, provided the local public school systems do not have the facilities appropriate for educating severely mentally and/or physically handicapped children. As a result of this amendment 914 children were given financial assistance to attend special schools during 1954-55. The law allows a maximum of $600.00 annually for each child in this program.

In 1954-55 the State appropriated to the State Department of Education, in its fund for handicapped children, approximately $500,000, of which $90,000 was used for home and hospital instruction. The remainder financed attendance of severely handicapped children at special schools.

VII. RECOMMENDATIONS OF GENERAL APPLICATION

A. Adoption of Philosophy and Policy of Responsibility

The Committee feels that it will serve a useful purpose to articulate in this Report and to have adopted and published, as the consensus of the State Board and the State Department of Education, its unanimous belief that a democratic system in general and a public school system in particular have a two-fold responsibility with respect to the education of atypical children, first to the child and second to society. First, the child is entitled, within reason, to whatever will enable him to develop his talent and aptitudes to the maximum. Second, society is entitled to impose the condition that such a child be made a useful member of society to the extent of his capacity. In other words, the right of a child to be educated involves this corresponding duty that he orient himself toward a constructive role in society as far as may be practicable.

The Committee realizes that the Department of Education fully recognizes this responsibility; indeed, the appointment of the Committee itself as well as the appointment of a supervisor of special education some years ago indicates such a recognition. Nevertheless, it is felt that it might be helpful to restate the matter here in order to confirm and support the Department in progressing toward a more nearly adequate program of special education. The view is not so obvious as it might seem: there has been a tendency to exclude the atypical child from educational planning as a forgotten group, or as defective material. It is necessary to remember that atypical children are entitled to public education equally with typical children.

It is also desirable that those connected with special education be cautioned continuously, in policy statements, that routine procedures not be allowed to supersede the recognition of the uniqueness of the individual child. A group of atypical children often exhibits as great a variety of traits as can be found in a group of typical children. It follows, therefore, that the principle of individual differences should be applied in planning programs and in teaching children.

B. Degree of Intermingling of Typical and Atypical Children

A second principle, universally felt, is that atypical children have

most basic things in common with other children and that every effort should be made to work them into the general education program insofar as this is possible and not harmful to the child. The pressure and weight of policy should be directed away from separating the child from typical children and toward effecting a true ultimate mingling in society. Programs should be organized on a separate basis only when such a procedure is necessary for the child's optimum development. In this determination, it should be recognized that placement with other children is psychologically good or bad, to the extent that true intermingling results or fails to result.

Some maladjusted children and some children who are mentally retarded may benefit from regular class placement. When this is true, they should be educated in the social situation of the regular classroom. Special class placement must be allowed, however, when the deviation requires it and also when research purposes make it appropriate.

A large number of children with locomotor and other physical handicaps can and should be made a part of the regular class instruction in the schools. For example, there is no special method of teaching reading to the child with poliomyelitis. The concept of numbers is the same to a cardiac child as to any other. On the other hand, some orthopedically handicapped children such as those with severe cerebral palsy may not be able to learn as nonhandicapped children do and will require special services and a variety of adjustments to bring them to the threshold of the learning act and to keep them physically and emotionally able to continue their academic and social learning. Special services and adjustments should be provided for them.

Providing educational services for atypical children becomes a problem because it is easy to concentrate on the handicap and forget the "whole-child concept." The Committee feels that educators should remember that the child is first and foremost a child with all the needs, aspirations, and problems of any growing and developing child and that secondarily he deviates from the typical in some degree or other. There is no greater tragedy in childhood than to be different. And yet, if separation is necessary to develop the child and if separate programs will assure the child of being more nearly like the typical child in daily living and accomplishment, the real tragedy would be to deny him the separate program. To avoid the possibility of too-great separation, the child should have opportunity to mingle with other children so that he will not grow up in a marginal, sepa-

rate fashion and, perhaps more important, so that the typical group of children will develop a respect for handicapped persons because of personal experience and familiarity with them during their early, more plastic, and receptive years.

C. The Team Approach

The Committee feels that in all categories of atypicality there is need to promote the use of the multidisciplined team in the evaluation and treatment of the problem of each child. In order properly to diagnose, prescribe for, and educate an exceptional child, it is imperative that medical specialists, educational authorities, parents, and teachers work together. A piecemeal programming for a child can be ineffective and even harmful.

There are, for example, few medical or educational situations which require to a greater extent the team approach and to a higher degree a mutual understanding than the planning of an educational program for a multihandicapped child.

Literally dozens of professional persons and other individuals may be involved. Each has something of value to contribute. In the case of a severely orthopedically handicapped child there will be two parents, a teacher, an occupational therapist, a physical therapist, a speech therapist, attendants, a nurse, a psychologist, a social worker, an orthopedic specialist, a brace maker, a pediatrician, a neurologist, and perhaps an audiologist, an otologist, an ophthalmologist, and a dentist. (See special recommendations for Children with Locomotor and Other Physical Handicaps, page 49.)

Teamwork for the emotionally disturbed child is at least equally important and in even greater need of development in future programs for this group. Traditionally the psychiatrist has taken responsibility for the decision in prescribing for these children, or in the case of the child guidance clinic the responsibility has been shared by the typical psychiatric team of psychiatrist, clinical psychologist, and psychiatric social worker. Actually for this child also other individuals have a contribution to make: two parents, a teacher, a general practicing physician or pediatrician, and others who may have had concern for the child, such as a public health nurse, a camp director or recreational worker, and even a policeman or juvenile court judge.

A start has been made in promoting joint evaluation and decision by these staff members but much remains to be done in improving working relationships. When difficult diagnostic problems and a seri-

ous difference of opinion as to the appropriate placement of a child are involved, there needs to be a top-caliber interprofessional team or council at the State level for periodic joint evaluation and diagnosis of the child's disability and for joint decision as to appropriate placement. Such a council would serve several important functions such as assisting local education authorities in carrying out admission policies and in documenting the nature and extent of unmet community needs in this area.

Liaison between the classroom and community agencies, including the home, is of course of the utmost importance. The difficulties of bringing about this desideratum are manifest. The Committee recommends that the pupil personnel service be expanded to provide more effective liaison. Such improved service may be achieved through increases in the number of school social workers, psychiatric social workers, or public health nurses.

D. Research and Evaluation Unit

A number of factors point to the need for the creation of a responsible unit to initiate, organize, and promote research and evaluation in the field of special education. Examples from industry and other fields have taught us that large benefits may well flow from financial investments in research. What is worth while in industry should certainly be worth while where we are dealing with the lives of thousands of children and enormous public expenditures. This should be the more true in view of many promising vistas opened up by the modern advances in science and in the teaching arts. Moreover, scattered research projects and experiments carried on in various parts of the world should be brought together for study and evaluation. Further, the experiences of the teaching profession should be systematically sifted for useful ideas. Finally, it is desirable that the useful results of research should be transmitted promptly and efficiently to those concerned.

It would be beyond the function of this Committee to propose the details of a research program. However, the Committee can and does recommend the following general scheme for implementation by the authorities involved:

1. The State Department of Education should establish a research unit on the State-wide level. Whether this would consist in a fixed center of activity or in a mobile institute would be decided by the unit itself and by the State Department of Education. The essential

point is to assign to one or more persons the responsibility for organizing and promoting research and evaluation.

2. Such a research unit should work in close collaboration with the health professions, including both the medical and psychological branches thereof. It is possible that a combined unit may prove best.

3. Attention should be given first to a canvass of past and present experiments and research projects and to an exploration of the most promising areas of research.

4. The research unit should give special attention to the problems of educating the multihandicapped.

5. The research unit should furnish data to be used for in-service training of teachers and others concerned with the education of exceptional children.

E. Preparing Teachers

The most startling defect in the existing special education program is the total lack of any organized effort to prepare teachers of exceptional children. Not only is there no plan or center for educating special teachers to take care of the various types of atypicality; there is not even a general survey course in the State teachers colleges for alerting and sensitizing the general teacher to the problems and techniques appropriate in teaching the exceptional child. What the general teacher learns, with rare exception, is learned by bits and pieces, as part of some other course. Nor do Maryland colleges and universities have any appropriate sequence of courses for educating special teachers of the deaf or blind or crippled or mentally retarded or emotionally disturbed. All such teacher education, with the exception of the preparation of speech therapists, is obtained out of the State.

The Committee therefore recommends:

1. That each of the five State teachers colleges be asked by the State Department of Education to provide a General Survey Course for all prospective teachers, wherein teachers will learn how to identify the exceptional child, what the basic physical and mental problems are, what the general teaching techniques are, and where they should go for more specific guidance. The Department has at hand the material for such a course. The course should include the techniques of recognizing the various types of deviation, and in particular the various types of maladjustment noted in the subcommittee report on the maladjusted (nondelinquent) child, the preventive aspects

of early case finding, and the method of co-operation needed in carrying out the treatment.

2. That the State Board and/or Department of Education urge one or more of the major universities or colleges, preferably in Maryland, such as The Johns Hopkins University, the University of Maryland, or the Towson State Teachers College, to establish a Department of Special Education to prepare special teachers in the following areas of special education:

a. Vision disability—on a southern regional basis
b. Deafness—on a southern regional basis
c. Reading disorders
d. Cerebral palsy and brain injury
e. Mental retardation
f. Speech, hearing, and language disorders
g. Multihandicaps

The Committee recognizes that other areas of special teaching may need to be developed in due course, as for example severe emotional disturbance.

3. That, until such teacher-education facilities are established in Maryland, the State Department of Education establish a scholarship plan whereby teachers now employed in Maryland and interested in qualifying as special teachers of any of the classes of exceptional children given above, may have summer school attendance subsidized for out-of-State schools by the State Department of Education

4. That as long as there is an administrative need for the employment of recent college graduates without teaching experience, the State Department of Education undertake to have special education scholarships made available to this group so that at least six semester hours of work will have been taken in this field before employment becomes effective

5. That the State Department of Education provide for the certification of special education teachers, setting up standards for the same

6. That a general survey course be part of the certification requirements of the general teacher

7. That an in-service training program be instituted. Selected teachers within a school system (one for every school, if possible; otherwise one in every area) should be given the special survey course on the exceptional child and these teachers should be responsible for helping others in planning programs in that school or school sys-

tem. (See recommendation under Section VII, H, Administrative Responsibility in Each School, page 39.)

F. Systematic Screening, Testing, and Planning for Exceptional Children

The Committee feels that the State Department of Education, through its Office of Special Education, can perform a valuable service:

1. By developing a systematic nomenclature for the various types and degrees of atypicality, particularly in the realm of communicative disorders; and by attempting to spread its use over the State through employment of the nomenclature by the State Department of Education

2. By developing means of identifying and dealing with the exceptional child at an earlier age than the present age of six years, inasmuch as many types of disabilities can be treated best when the child is young and pliable and ready to learn: For example, since every child is developmentally ready to walk and talk before he reaches the age of six, the education of a cerebral palsied or partially hearing child should begin when his body and mind are ready to learn these skills. In this connection the Committee urges that the State Department of Education recommend changing State laws to cover the preschool child who is handicapped. It is of interest to note that the General Assembly of 1956 has already given cognizance to this point in House Resolution No. 34.

3. By designating on a State-wide basis the standard tests for measuring and evaluating the following types of atypicality:

Giftedness	Hearing impairment
Retardation	Reading disabilities
Cerebral palsy	Maladjustment
Visual defects	

4. By calling for periodic tests of each child, at least twice a year in the field of the maladjusted. (Present tests in other fields should be continued.)

G. Improvements Benefiting All School Children

There are many needs in the school program, the satisfaction of which would benefit the typical and the atypical child alike. These are well known and the Committee merely adds its voice to the others, recognizing that the statement of an ideal, while its realization may

not be practicable at the moment, serves as a stimulus and a measure of progress. Among these desirable improvements are:

1. The lowering of pupil-teacher ratios, i.e. less children in each class. This is especially important in recognizing children with behavior disorders.
2. Better qualified teachers and improved teacher education
3. Adequate buildings, including architectural details suitable to handicapped children
4. More pupil personnel workers and increased services
5. More psychologists
6. Better equipped school libraries

H. Administrative Responsibility in Each School

The key to the execution of any special education program is a system for fixing responsibility in each school for promoting the program. Ideals, plans, and policies are useless without at least one responsible person for each school to see to it that the exceptional child is taken care of. Someone must gather together the records for the child, organize the team diagnosis and prescription, and guide the teachers who work with the child.

The Committee does not propose employing large additional staffs for the purpose but rather utilizing existing personnel insofar as possible.

The Committee visualizes the selection in each school of a teacher or the principal, to be responsible in that school for seeing that each atypical child receives the special services called for in the general program, subject of course to the usual supervision. In some schools there will be too few cases to warrant a special representative in that school. In these instances county supervisors can be assigned the task.

In all cases where it is possible, the person selected should be a teacher who has been prepared in special education, and if such a one is not available, then someone who has expressed an interest in it. The program for teaching the teachers should be tied in with this program for fixing a school-by-school responsibility. This can be cared for very easily by co-ordinating the school assignments of teachers with the teacher education courses. The Committee visualizes eventually the establishment in each school of a trained teacher especially interested in special education who will serve as a stimulus, guide, and center of information for the other teachers.

This school-by-school teacher apparatus should be organized and directed by the local departments of education. The State Department of Education should stimulate and co-ordinate and, where needed, provide supervisory service. The State Department of Education will need appropriate enlargement of its supervisory staff in special education, as will some of the counties.

Provision should be made for released time for teachers who are called upon to implement the suggestions set forth in this Report.

VIII. RECOMMENDATIONS WITH RESPECT TO SPECIFIC TYPES OF EXCEPTIONAL CHILDREN

The aforegoing recommendations apply more or less completely to all seven categories of atypicality. In addition, there are a number of specific suggestions in each field. The background for these will not be explained here inasmuch as the seven subcommittee reports will be fully printed in a separate publication.

A. Visually Handicapped Children

The Committee recommends as follows:

1. General Recommendations
   a. That the State Department of Education make a study of the needs of each child with lowered visual acuity in order to plan for him an education commensurate with the sight level at which he functions. (Some children with 20/200 or less function at the sighted level.)
   b. That a medical survey of the health needs of each severely visually handicapped child be undertaken by the Crippled Children's Program in the State Department of Health with the authority to follow through on the recommendations which result from the survey, such survey team to be composed of ophthalmologists, pediatricians, and such other specialists as are needed; and that pertinent information be made available to the parents and family physicians of the children concerned
   c. That, after such studies of the needs of each child have been made, his placement in an educational program be determined (subject to a hearing of the parents and a right of review) by a board of review consisting of ophthalmologists, educators (including the superintendent of the School for the Blind), and other such specialists as are needed. (Residential schools for the blind should not be used for the education of the partially seeing child.)
   d. That the State Department of Education develop educational programs for these children in the public school system, these programs (1) to include the residential school, classes in day

public schools, and home teaching, and (2) to utilize boarding and traveling facilities when necessary. It is hoped that the board of review can place the majority of the children in regular classes; if such facilities are not available, however, the Committee recommends that a system of helping teachers and supervisors be utilized for this program, such teachers to be qualified specialists in the education of visually handicapped children and thus able to interpret to the regular teacher both the child's eye condition and his educational needs. Should any question of placement arise, the judgment of the board of review will be the determining factor. (Residential schools for the blind should not be used for the education of the partially seeing child.)

e. That, in metropolitan areas of the State, the State Department of Education study the needs of the children who are functioning at the level of the blind with the idea of planning a public school program for these children and determining the best channel of learning for each, whether it proves to be through the Braille system or through large print materials

f. That the local departments of special education inquire of the American Printing House for the Blind concerning the availability of teaching material under the quota system as it applies to the number of children who are functioning at the level of the blind

g. That there be established in the State Department of Education a lending library of large-print books and of other materials appropriate for visually handicapped children at the various grade levels

h. That the State Department of Education employ a supervisor or consultant in the field of the visually handicapped to provide more help and consultative service to teachers of visually handicapped children in the State

i. That the State Department of Education study the needs of visually handicapped children who have additional handicaps and develop an adequate educational program for them, whether they are institutionalized or living in their own communities

j. That the State Department of Education provide the type of

education service needed by visually handicapped children who, for good reason, must remain in their homes

2. Recommendations with respect to the Maryland School for the Blind

   a. That the Maryland School for the Blind, if its consent can be obtained, be placed under the supervision and control of the State Department of Education. It is felt that if the State is to continue to assume major financial responsibility for the School, then in this instance the State should have control of the education program.

   b. That a principal be employed at the Maryland School for the Blind to assist the superintendent in the education program for all the children in the school, the principal to assume responsibility for the scheduling of the program, the course of study, the curriculum adaptation, as well as certain phases of the extracurricular activities of the school*

   c. That the State Department of Education arrange for a committee of representatives of the Maryland School for the Blind and local school systems for the purpose of evaluating individually the needs of children living in each area; and that this committee work co-operatively in order that facilities and materials may be shared more extensively particularly with respect to offering high school pupils a more highly individualized and expanded program in Baltimore City

   d. Insofar as the State Department of Education can, it shall see that the authorities at the Maryland School for the Blind gather as much objective information as possible concerning those accepted as enrollees; that just as careful an evaluation be made while the children are at the school; and that this evaluation be made available in writing to a suitable agency, such as the Division of Vocational Rehabilitation, when the students leave the school

   e. That the superintendent and teachers of the Maryland School for the Blind carry on a continuous study of their existing program of instruction with the idea of enriching the curriculum by the addition of certain subject matter, particularly in the social studies, including subjects of vocational and sociological interest to the pupils

* This was accomplished prior to the publication of this Report.

f. That the State Department of Education study the question of out-of-State children's attendance at the Maryland School for the Blind

g. That the Negro School for the Deaf at the Maryland School for the Blind be removed physically and administratively from the services for blind children*

3. Recommendations concerning Mental Health of the Visually Handicapped Child

a. That the State Department of Education acquaint the staffs of mental health clinics with the Department's problems in testing and educating visually handicapped children with a view to enlisting their co-operation in the solution of the problems

b. That the State Department of Education request appropriate agencies to screen visually handicapped children in order to find the maladjusted and to give them the benefits of early treatment

4. Recommendations concerning the Preschool Visually Handicapped Child

a. That, on the basis of existing laws, the State Department of Education develop in local communities adequate case-finding and casework service to diagnose preschool children who are visually handicapped; that the final step in this process for the preschooler be an eye examination just before entering school

b. That persons undertaking the important responsibility of counseling parents of preschool children should have at least the basic professional qualifications as recognized in this field.†

c. That the State Department of Education evaluate the institute method of helping parents and children in accordance with the needs and resources available in the State at any given time

d. That a local school system be urged to accept a visually handicapped child in nursery school and kindergarten with sighted children if a study of the child shows that he will receive

* This has already been accomplished.

† *Report of the National Work Session on the Preschool Blind Child,* 1951. pp. 57-67. (Published by the American Foundation for the Blind, 15 West 16th Street, New York 11, N. Y.)

maximum benefit from such a placement. (Experience has shown that only a few can be absorbed in any one class.)

e. That extreme caution be exercised in the evaluation of a preschool visually handicapped child, particularly an infant; that this evaluation, in the absence of valid instruments of measurement, be based on all information possibly available from those who know the child (i.e., the pediatrician, ophthalmologist, social worker, psychologist, parents)

5. Vision Screening

a. That local departments of education improve their testing of vision, such improvement to include a program of testing by capable personnel, preferably every other year but no less than once every three years from kindergarten through twelfth grade. That a committee consider a revision of the screening methods and link this activity with learning experiences.

b. That the State Department of Education urge local departments of education to increase available time for school nurse follow-up of children screened and found in need of care and for maintaining records of the status of children requiring eye examinations

c. That the State Department of Education request local departments of health to expand ophthalmological clinical service in each county and acquaint the various county medical societies with the nature and extent of the problems involved

B. Speech, Hearing, and Language Handicapped Children

The Committee recommends:

1. That a ten-point program, as follows, be adopted by the Department of Education as guiding principles for work with children having communicative disorders:

a. Hearing rehabilitation is a many-sided co-operative endeavor involving the pediatrician, the otologist, the clinical audiologist, the psychologist, the teacher and, above all, the parent. It cannot be fully effective except as this group learns to work as a team.

b. Communication in these children is an entity, involving acoustic, linguistic, visual, behavioral, developmental sensory-

motor, and social elements which are contributory aspects of the whole child. Hearing, speech, and language cannot be isolated from one another or divorced from the over-all developmental process.

c. Treatment and training should be based on a full diagnostic appraisal which includes an early measurement of the amount of residual hearing, and, when possible, the child's ability to use it.

d. Treatment and training should be started as early as possible in the child's life. The period from 18 to 30 months seems best. The child between the ages of two and five years is at his peak as a language-learning individual; never again will he exhibit such a state of readiness, need, and desire for the acquisition of language and speech. So far as the tools of communication are concerned, the child's career does not begin at school, but in infancy.

e. With appropriate handling, even children with a profound impairment can learn to talk and participate in normal communication.

f. The majority of children with impaired hearing have a great deal of residual hearing and can utilize amplified sound to the utmost, providing this use is started at an early age and the effect made an integral part of the developing mind. Even the child with a profound loss can benefit to some degree from amplification.

g. Wearable hearing aids make sound louder and provide the means for putting the child in contact with sound through all his waking hours. Children seem to make the best adjustment to a wearable aid between two and three years of age. Each child must be timed according to his readiness and need as a developing person. A serious error is often made in waiting too long, until a child is five or six years old, when his best period for language learning is past.

h. With any particular child who has a handicapping hearing impairment, the question is not, "Is special training necessary?" but "How much and what kind of special training is necessary?" Some special handling is always necessary at home and at school. Sometimes special work in connection with a regular nursery school or elementary school is indicated;

sometimes a special day or residential school seems best. This is a task for careful audiologic-educative determination.

i. Most children develop best in a situation which is the closest approach to normalcy and yet which offers means for meeting the special needs of the child.

j. Parent understanding and parental guidance are the keys to early steps in working with the child with a severe hearing impairment. Progress is usually made in direct proportion to their understanding and acceptance of the problem with which they are faced. They need to understand how communication develops, and how they can and must stimulate it in the minute-by-minute experiences of the child. They must be shown how to communicate clearly and simply at short distances, using the same vocabulary over and over in a wide variety of situations, until meaningful relations are grasped and the child begins to relate and store them, and eventually to reproduce them in his own speech. They must learn how to anticipate communicative requirements and to expand the child's vocabulary after initial steps have been taken. There is always parental uneasiness in facing the daily problems related to the child, and parents need support and reassurance.

2. That special education for communicative disorders be established in each county (or group of counties, as is deemed wise) in a regular school, where special training in appropriately graded classrooms will be available to children who need more than the transient special teacher can offer

3. That the State Department of Education obtain clarification of its responsibilities and duties pertaining to the Maryland State School for the Deaf in Frederick

4. That an attempt be made to integrate on a State-wide basis the educational programs of these exceptional children in all special institutions, under the leadership of the State Department of Education

5. That the State Department of Education be authorized by law to expend its funds to supply special services at the preschool level

6. That children who have hearing, speech, and language disabilities be referred to vocational rehabilitation just as soon as they are old enough to begin thinking about preparing for employ-

ment. This might be while they are still in elementary school.

7. That there be established at least one additional special training center for advanced study and credit for certification in hearing, speech, and language disorders

It may be appropriate to comment here on the child who suffers from specific reading disability.*

Reading as a tool is essential to the learning of nearly every other school subject. It is, therefore, to be anticipated that the implications of failure in reading involve not only a child's academic future but also his emotional, mental, and physical well-being.

It is recognized that a great number—probably a majority—of reading problems among children are due to handicaps singly or in combination considered elsewhere in this Report. Included would be mental retardation, emotional maladjustment, hearing impairment, visual disability such as refractive error, and general poor health.

Among the etiological categories of reading difficulties, however, there is now known to be a specific reading disability which frequently constitutes a puzzling diagnostic problem. This syndrome was originally described by Dr. S. T. Orton who offered the term *strephosymbolia,* twisted symbols, as a technical name. By this he meant a delay or difficulty in learning to read which is out of harmony with a child's intellectual ability.

At the outset, specific reading disability is characterized by confusion between similar but oppositely oriented letters and a tendency to a changing order of direction in reading. He conceived of this as being a physiological dysfunction, the result of uncertain establishment of cerebral dominance in the language function, neither hemisphere taking the lead. As handedness is established, so also is established a physiological habit of use by means of which records stored on one hemisphere come to be used and the corresponding but reversed records on the other hemisphere come to be ignored.

Certain outstanding common characteristics are found among these cases of dyslexia, and these may appear in various combinations. They include: 1) reversal of symbols; 2) poor spelling; 3) auditory confusion; 4) writing disability with frequent mirror

* The following statement is based on information supplied by Dr. Norma B. Keitel.

writing; 5) hereditary family pattern; 6) sex association, with a ratio of at least 14:1 in boys.

Diagnostic evaluation of children handicapped with a reading disability should include a good medical, emotional, social, and school history, as well as specific medical, neurological, ophthalmologic, audiometric, and psychological tests where indicated. Treatment may be managed in various ways, although the observance of certain fundamental principles in all cases is essential. The technical measures of re-education in these cases are simple, definite, and almost invariably assured of success.

It appears to the Committee that very little is being done in the way of special education for children suffering from this disability. The Committee recommends that the State Department of Education now actively participate in the initiation of experimental programs for these children and, where proven practicable, in the establishment of regular programs.

C. Children with Locomotor and Other Physical Handicaps

The Committee recommends:

1. That the bold and imaginative examples of assimilation in regular schools as a method of providing educational services to exceptional children, which are currently multiplying in the county boards of education, be endorsed, and that a tentative goal be set so that at the end of five years a reasonable proportion of children in the locomotor and other physically handicapped group be assimilated into regular classrooms with appropriate special services available to them. It is recognized that some children have a severity of handicap which requires a greater degree of separateness in the type of educational facility.
2. That the eight types of specialized medical diagnostic clinics maintained by the Maryland Crippled Children's Program supplemented by the county mental health clinics and other existing resources be fully utilized to provide as complete and definitive total medical evaluation as indicated, before a plan for educational needs is made. These diagnostic services should be expanded as necessary to meet the need. A uniform medical evaluation report should be developed and kept on file with the school health record of each child who has special education placement. This report should be a part of the cumulative school and health record.

3. That the State Department of Education urge the State Department of Health through its program for handicapped children to take the leadership in developing an interprofessional diagnostic and planning group in a sufficient number of areas to serve each county to provide a basis for joint decisions on the best plan for treating children with the more complex and difficult problems, especially those children with multiple handicaps. The Crippled Children's medical diagnostic clinics in the county health department should provide the medical nucleus.
4. That special education facilities for physically handicapped children be based on adequate school facilities with well-prepared teachers, satisfactory pupil-teacher ratios, and school buildings suited to the needs of these children. This latter point is urgent and should receive top priority now so that exceptional children will not be "built out of school" in the current spate of construction.

D. Gifted Children

The Committee recommends:

1. That the State Department of Education endeavor in its training and qualification of school personnel
   a. To give special attention to educating principals, librarians, and guidance and counseling personnel in the needs of gifted children and the ways of meeting these needs
   b. To have selected teachers within a school system (one in every school if possible; otherwise, one in every area) take special courses on teaching the gifted child and to make these teachers responsible for helping others in planning instructional programs in that school or school system
2. That the State Department of Education, in the general survey course, in the in-training courses, and wherever else opportunity occurs
   a. Encourage and instruct teachers in the use of the "enrichment" technique with gifted children. ("Enrichment" has a special meaning as explained in the subcommittee report on gifted children.)
   b. Encourage teachers, supervisors, and principals to try experimental programs for gifted children under conditions where the results can be evaluated

c. Instruct teachers of gifted children to emphasize that intelligence is inferior to wisdom; that is to say, that intellectual capacity is estimable only insofar as it is dedicated to worthy objects. Brilliance is subject to the rules of responsibility and service.

d. Urge principals and supervisors to study the "workshop" or "club" type program and adapt it to the needs of their pupils

e. Discourage supervisors, principals, and teachers from accelerating a child except where careful study indicates that a child is as well developed in all aspects of his being as he is mentally

3. That the State Department of Education suggest to the appropriate authorities that an evaluation survey be made of School No. 49 in Baltimore City as a guide in organizing programs for gifted children
4. That the State Department of Education continue to press for a reduction of class size and for improvement of libraries and laboratories and materials of instruction. Important as these points are to all children, they are especially important to the gifted child.
5. That the State Department of Education promote means of identifying in school records gifted children during their elementary school years. These means are of course appropriate tests, teacher observation, and case studies.

E. Mentally Retarded Children

The Committee recommends:

1. That the $600.00 per handicapped pupil (as stated in the law) be appropriated in addition to whatever money is available for this child by reason of his enrollment in a public school. This principle should apply equally to all local units, whether equalization or nonequalization.
2. That the law authorizing State aid (Article 77, Section 234 of the *Annotated Code of Maryland,* 1951 edition) be amended to be applicable to handicapped children before the age of six. The more severely retarded child has a definite need for education before the age of six. Speech, socialization, food habits, lessening of hyperactivity, self-help, and parent education are some of the objectives. It is in order to make this educational resource available to more severely handicapped children, particularly to the trainable child, that the law should be amended.

This would enable both private schools and public schools now operating under the State aid law to organize nursery school-kindergarten classes and accept such children before the age of six.

3. That the State Department of Education encourage the formation of parents' groups for the parents of mentally handicapped children
4. That the Co-ordinating Curriculum Committee sponsored by the State Department of Education be assigned the task of selecting and distributing to local departments of education up-to-date literature concerning mentally retarded children
5. That the State Department of Education recommend that the Governor appoint a Sheltered Shop and Colony Authority composed of members representing the Department of Welfare, the Department of Mental Hygiene, the Office of Vocational Rehabilitation and the Office of Special Education in the State Department of Education, corresponding personnel from the City of Baltimore, and representatives from the various private societies representing mentally and physically handicapped children and adults, to formulate a plan for a pilot project to be known as The Maryland Authority for a Sheltered Shop and Colony for the More Severely Mentally Handicapped
6. That the State Department of Education establish organizational patterns for classes for the mentally retarded, with special attention given to age levels, size of class, housing and facilities, equipment and supplies, and transportation
7. That the State Department of Education appoint for mentally retarded children additional supervisors who will aid the Supervisor of Special Education in the development of programs for the educable mentally retarded and the more severely mentally retarded

F. Maladjusted Children (Other Than Delinquent)

The Committee recommends:

1. That the Department of Education promote expansion of the facilities of psychiatric and psychological diagnostic and therapeutic services to children through consultation with established agencies
2. That the Department of Education consult with appropriate agencies and promote training and research in the methods of

teaching the brain-injured child. (See Section VII, D, Research and Evaluation Unit, page 35.)

3. That the Department of Education take cognizance of the problems of acculturation that give rise to behavior disorders with a view to promoting further study in this field

Many of the recommendations suggested for the maladjusted child were of such a nature that they have been placed in the "Recommendations of General Application" (Section VII, page 32). They have not been repeated here but should not be overlooked in any consideration of an educational program for the maladjusted.

G. Delinquent Children (Adjudicated)

The Committee recommends:

1. That review be made of the question of the use of a State subsidy for emotionally disturbed children, including the nondelinquent, whose needs are not being met by existing services and facilities; the question being, Should the same $600.00 which is given to other handicapped children be given to emotionally disturbed children?
2. That the State Department of Education recommend the construction of a State-wide study center for the purpose of giving care to the hundreds of children now passing through the State training schools on a short-term or detention basis*
3. That the detention program of juvenile courts be separated from the State training schools for two major reasons:†
   a. It is unfair to the staff of the training school to saddle it with this additional responsibility which is part of the court process.
   b. It is unfair to the children who have been detained to run the risk of labeling them as training school children.
4. That as soon as available the publication of the U. S. Children's Bureau entitled "Tentative Standards for State Institutions Serving Delinquent Children" be made available to institutions, probation officers, and legislators
5. That the State Department of Education recommend to the State Department of Public Welfare
   a. That educational requirements for teaching personnel in the

* This is now being implemented in connection with the present Barrett School.
† This also is in process of implementation.

State training schools be high, but realistic, with the minimum age at 22 and the maximum at 55 for new employees. Standard teacher qualifications and salaries should apply. It is of course desirable that training school personnel be emotionally mature and have a genuine interest in children.

b. That in the girls' training schools further emphasis be placed on home economics and food services, and ample opportunity for practice provided in these areas

c. That separate training schools for boys and girls be operated, recognizing that co-educational institutions are difficult to administer successfully for adolescent delinquents

d. That training school cottages provide for a combination of small dormitories and single rooms

e. That health services including psychological services with qualified personnel be provided in State training schools

f. That a work camp program for teenagers be considered, either as a part of the training school program or as part of the probation setup*

g. That consideration be given to the possibilities of use of community schools by the training schools for children under care

h. That careful study of the effect of the Supreme Court decision on integration as related to the educational program of the training schools be undertaken

i. That remedial reading programs geared to the serious retardation in this subject that prevails among many young delinquents be undertaken. This should include a diagnostic and a remedial service in small groups.

6. That the county public schools be urged to operate programs similar to those at the Bragg and Highwood schools in Baltimore City either on a day basis or on a 24-hour basis in order to prevent delinquency and commitment

7. That carefully supervised work-study or work-school programs be developed to prevent delinquency among teenagers who are compelled to continue in school when their interest is no longer maintained

8. That improved liaison between the public schools and the train-

* This also has been implemented and further expansion of this program is anticipated.

ing schools to expedite placement of children returning from commitment be provided. This would be most desirable in the area of educational achievement.

9. That the State Department of Education obtain clarification of its responsibilities for the education of children committed to the State reformatories and training schools

H. Multihandicapped Children

Many children have several handicaps. For such children, the programs for each handicap cannot be simply added together, because special problems arise by reason of the combination.

Multihandicaps occur primarily in the following combinations:

1. Cerebral palsy is often combined with muscular inco-ordination, speech disability, hearing disability, sight disability, and mental retardation.
2. Hearing disability is often combined with speech disability.
3. Mental retardation is sometimes combined with muscular inco-ordination, speech disability, and blindness.
4. Deafness and blindness are sometimes combined, and this double handicap is always combined with a speech disability.
5. Epilepsy is sometimes combined with cerebral palsy and other forms of brain injury.
6. Emotional maladjustment is often combined with severe handicaps such as cerebral palsy, deafness, blindness, epilepsy, and sometimes even with exceptional gifts. Moreover, emotional maladjustment often produces delinquency.

It will be seen at once that the problem involves determining for many children which handicap, if any, is dominant and whether or not any one handicap is basic to the others. For example, if a severe physical handicap is at the source of an emotional maladjustment, obviously the cure must be centered around the basic physical handicap. Similarly, a speech handicap growing out of deafness is treated primarily in connection with the program of deafness whereas a speech disability of the cerebral palsied child requires a different approach. It may be, however, that no one handicap predominates and that only a careful evaluation of the child will reveal his particular needs.

The public school programs for multihandicapped children are not adequate to care for the needs of these children in the State. At present there are several centers for cerebral palsied children. These centers provide physical, occupational, and speech therapies but are not

equipped to educate the cerebral palsied who are mentally retarded. The latter, if their physical condition is not severe, may be placed in programs for mentally retarded, but there is no provision for severely palsied children who are also mentally retarded. The same lack exists for the blind who are retarded and the blind who are deaf. Moreover, children who suffer from severe epileptic seizures which cannot be controlled by medication and which usually produce emotional problems are without an adequate program, but those whose seizures can be controlled are accepted in the public school and have programs adjusted to their needs. There are, likewise, several programs for children who are hard of hearing and have attendant speech defects. These programs exist in some of the public school systems and at the Maryland State School for the Deaf. However, the problem of emotional disturbance (which quite frequently is part of a multiple handicap) has not been met in Maryland.

In general, multihandicapped children are the most difficult to help of all the children served by special education. They compel one to be searchingly sincere about one's philosophy of special education; they require a sequence of varying medical services and ancillary therapies, integrated over approximately five years or more of time; they call for teaching that co-ordinates itself with the therapies and finds the beginnings of success in minor victories at pre-chart levels of co-ordination, speech, reading, and writing.

Multihandicapped children have the highest per capita cost of all the children served by a public school system. After years and years of service they have been markedly helped, but eight or nine times out of ten they are still multihandicapped children, beloved by parents and friends, socially adjustable under special environments, and unemployable except at sheltered-shop levels. Over-all planning on a continuing basis is needed. For the severely multihandicapped, the school has a responsibility but only as integrated with other services planned on a lifetime basis.

The old criterion that none but the mentally normal and better should be served among the physically handicapped has broken down. Special education serves physical and mental deviates of single handicap or of multihandicaps, of any level of ability, if there is any evidence of being able to improve them significantly physically, socially, academically, and vocationally. Multihandicapped children typically require specially set-up classes either in separate buildings apart from regular elementary and high school buildings or in special suites of suitably equipped and staffed rooms in regular school buildings.

The Recommendations of General Application (Section VII) constitute the Committee's recommendations for the multihandicapped child. Among these the Committee emphasizes:

1. The necessity of the "team" approach
2. The importance of a research program in co-ordination with medical research
3. The need for education before the age of six
4. The desirability of instructing prospective teachers of these children in many phases of special education
5. The importance of periodic reassessment of these children

As to the last item, the Committee feels that the State Department of Education should urge the State Department of Health through its program for handicapped children to take the leadership in developing at least one comprehensive medical evaluation unit with integration of the appropriate medical and allied specialties for the comprehensive total health appraisal of the handicapped child to provide a foundation for a regimen of care and a rational basis for a plan for special education services.

The Committee feels that this type of facility is urgently needed, particularly for certain complex diagnostic problems presented by children with multiple handicaps. It is not intended that this service will be needed for the majority of handicapped children. Further it is not intended that this group diagnostic decision will be final for any child but rather it should be a periodic review to see whether the program designed for the child is still appropriate and whether improvement of the handicap has occurred.

IX. CONCLUSION

The Committee acknowledges that the subject is so vast and complex that no report of this size could do justice to it. Furthermore, because of the scope of any special education program, its recommendations must for the most part remain somewhat general. The detailed applications, the administrative machinery, the hundreds of subordinate decisions to be made with respect to any acceptable recommendations must of necessity be worked out by the officials of the public school system, both State and local, in particular by the existing Supervisor of Special Education. Some members of the Committee felt that the State Department of Education should provide for the establishment of a further Advisory Committee to assist in the implementation of the special education program.

However that may be, this Committee begs to be discharged in the hope that its work may be of some use and that having toiled so long, it will not be thought to have produced no light. It has in fact received some encouragement from evidences that the very work of making the study has already stimulated advances along the lines of some of the recommendations.